

LEL-MPS GAS SENSOR

When your workers' lives are at stake, accuracy matters.



A FLAMMABLE GAS SENSOR THAT DOES IT ALL. Blackline Safety' G7 connected combustible gas detectors use industry leading Molecular Property Spectrometer (MPS™) Flammable Gas Sensor by NevadaNano. The MPS sensor's innovative technology delivers TrueLEL™, offering the most accurate readings in the market for over 14 of the most common combustible gases and gas mixes — including hydrogen — while eliminating issues found with traditional sensors.

To learn more about the safest combustible gas detector on the market, **contact Blackline Safety today.**

» BlacklineSafety.com

blacklinesafety

- ✓ Poison immune
- ✓ Multi-gas protection – including hydrogen
- ✓ Accurate, automatic readings without correction factors
- ✓ Automatic gas classification
- ✓ Extended Lifetime (5+ years)
- ✓ Reduced false alarms



YOUR EMPLOYEES HAVE NEVER BEEN THIS SAFE

With the MPS sensor, your employees will have the most accurate and comprehensive view of the safety of their surroundings. The MPS sensor provides the most accurate reading for over 14 combustible gases simultaneously, without the need for any correction factors.

Immune to poisoning (including silicones), the MPS sensor refuses to be compromised. And, if for any reason the sensor isn't functioning properly, it's built-in fail-safe design will alert the user. Your workers will never unknowingly be vulnerable in a hazardous environment again.

MOST ACCURATE LEL SENSOR

The MPS sensor is intrinsically safe, stable, poison immune and can accurately detect over 14 combustible gases from one calibration with reduced false alarms or non-alarms due to a wide environmental operating range.

- Hydrogen
- Ethane
- Butane
- Xylene
- Propylene
- Methane
- Propane
- Pentane
- Toluene
- Isopropanol
- Isobutane
- Isobutylene
- Methyl ethyl ketone
- Octane

Contact us for information on detecting other gases.

AUTOMATED GAS CLASSIFICATION

The MPS sensor can analyze gas properties and classify gases based on their molecular weight and density into one of six gas categories. This rich data is streamed directly to the Blackline Live cloud-based platform providing important insights into the location, frequency, and types of gases being encountered by a workforce. The six classifications of gases are as follows:

CLASS 1: Hydrogen

Carbons Present: 0



CLASS 2: Hydrogen Mixture

Carbons Present: Varies



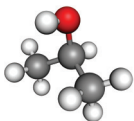
CLASS 3: Methane/Natural Gas

Carbons Present: Typically 1 - 2



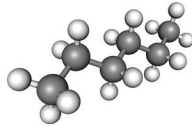
CLASS 4: Light Gas (or Light Gas Mixture)

Carbons Present: Typically 1 - 4
Likely Gases: Ethane, Propane, Butane, Isopropanol



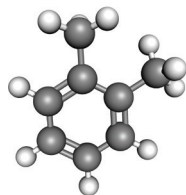
CLASS 5: Medium Gas (or Medium Gas Mixture)

Carbons Present: Typically 2 - 8
Likely Gases: Pentane, Hexane



CLASS 6: Heavy Gas (or Heavy Gas Mixture)

Carbons Present: Typically 6+
Likely Gases: Octane, Toluene, Xylene



RELIABLE AND ACCURATE

When deciding what type of gas detector you need, it's important to consider that application it will be used for. Each type of sensor has both advantages and disadvantages. The MPS sensor provides the reliability you need so you can be confident with the safety of your team.

Sensor	Key Advantages	Key Limitations
MPS Sensor	<ul style="list-style-type: none"> • Immune to poisoning • Extended Lifetime (5+ years) • Detects full range of flammable gases • Accurately detects mixed gases • Classifies gasses into one of six categories • Reduced false alarms due to built-in Environmental compensation • Fail-safe, self-diagnostic capability 	<ul style="list-style-type: none"> • Requires an oxygen atmosphere for accurate readings
Pellistor (Cat Bead) Sensor	<ul style="list-style-type: none"> • Detects full range of flammable gases • Predictable sensitivity and correction factors • Simple to operate • Long-lasting 	<ul style="list-style-type: none"> • Susceptible to poisoning and inhibition • Requires an oxygen atmosphere for accurate readings • Sensor failures default to fail-to-unsafe • Significant variation in response to different gases • Readings are accurate for the target gas or when using correction factors. Other gases will be detected, but readings can be inaccurate.
Non-Dispersive Infrared (NDIR) Sensor	<ul style="list-style-type: none"> • Fail-to-safe failure modes • Immune to poisoning and inhibition • Low power consumption • Operates in oxygen-depleted and enriched environments 	<ul style="list-style-type: none"> • Unable to detect hydrogen and acetylene • Readings are only accurate for the target gas. Other gases can be detected, but readings will be inaccurate

LESS DOWN TIME - MORE GO TIME

The MPS sensor has built-in environmental compensation and doesn't need a correction factor, meaning your employees will never be interrupted by unnecessary false alarms again.

It's long lifespan also ensures your workers can confidently use this sensor for years at a time, cutting through any learning curves.